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ABSTRACT

To measure the effectiveness of the Basic Skills Education Program (BSEP) reading curriculum--eight reading skill modules employing military job-specific reading materials and used by the U.S. Army in Europe (USAREUR)--and to provide information for improving it, a study examined 183 soldiers from 38 European posts who were enrolled in the BSEP reading program from September 1986 through March 1987. Pretest/posttest measurements were taken, using the Tests of Adult Basic Education (TABE) and General Technical (GT) Predictor Test (a section of the Armed Forces Classification Test). Pre-class and post-class surveys gathered demographic data and other relevant information, including possible reading problems, course expectations, and program and instructor effectiveness. Results indicated that problems with soldiers' job-reading tasks were being addressed by the military job-reading program. Soldiers and teachers judged the curriculum to be both relevant and useful to soldiers' occupational needs, and improvement on reported individual pre/post module tests indicated the effectiveness of curriculum materials in addressing job-reading competencies. (Two figures and 12 tables of data are included, and a sample set of evaluation forms is appended.) (MM)

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BSEP/CSEP READING EVALUATION: A STUDY OF THE EFFECTIVENESS OF THE U.S. ARMY EUROPE'S BASIC SKILLS/CAREER SKILLS JOB-SPECIFIC READING PROGRAM

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ABSTRACT

This paper describes the results of a formative study of the fully-operational European-wide use of military job-specific reading materials with U.S. soldiers enrolled in Basic Skills Education Program reading courses. It details the effectiveness of contextual functional job materials in teaching job-specific applications of reading skills which enhance job performance. It also demonstrates the transferability of reading skills improvement from instruction with an exclusively job-specific curriculum to performance on generic reading materials as evidenced in statistically significant pre-/posttest gains measured by standardized tests (the TABE and a predictor version of the GT portion of the AFCT). Evaluation data was collected from 183 enlisted participants and teachers from thirty-eight locations to represent a geographical cross-section of the ninety-six different U.S.military occupational categories (MOS's) employed throughout Europe.

FORMATIVE EVALUATION OF BSEP/CSEP READING

Background

The Basic Skills Education Program (BSEP) reading curriculum currently in use was created by Big Bend Community College in response to a requirement by the U.S. Army in Europe (USAREUR) for job-specific reading instruction. For the previous decade, USAREUR had contracted with educational institutions to provide traditional reading instruction. It was theorized that such instruction would help soldiers perform the reading tasks required by their jobs. In fact, however, while traditional reading instruction built soldiers' self-confidence and helped them to function in a literate society, it did not improve significantly their performance on job-specific reading tasks. The problem stemmed from the ineffectiveness of using traditional reading materials for improving job-specific reading. [1]

Researchers studying the process of reading have concluded that comprehending meaning from a printed page requires more than automatic decoding (word attack) skills. Readers must have prior knowledge or experience from which to build a context (schemata) for the material being read. [2] In BSEP, traditional materials do not develop the necessary context for job-specific reading. They merely enhance commonly-known information as they improve traditional reading skills. This accounts for their ability to raise reading scores on traditional reading tests (e.g., the Tests of Adult Basic Education [TABE]).

Researchers have also concluded that the opposite is true of job-specific reading materials: i.e., that they not only develop necessary context for job reading tasks but they also improve traditional reading skills. This is due to the fact that the job-specific materials are merely an instructional vehicle for the initial learning and practical application of traditional reading skills. Job-specific materials also serve as important motivation for adult learners because they are perceived as relevant to the learners' immediate needs.

At the onset of the BSEP contract awarded in January, 1983, Big Bend began the development of a job-specific reading curriculum and instructional materials. As new materials were developed, they were integrated into the existing program which was primarily based on a variety of commercial texts. Early in 1984 two instructional volumes were completed, Volume I: Comprehension and Volume IV: Test-Taking Strategies. In August 1984, the design of the BSEP reading curriculum was modified in response to BSEP instructor and student recommendations. Volume IV was retained and Volume I was phased out of the program. In 1985 The BSEP Reading Anthology and Reading To Do were introduced to the program, followed by Reading To Learn early 1986. These three new texts now comprise the course curriculum for the BSEP reading program in USAREUR. They consist of a collection of job-specific readings and eight reading skill modules. The focus of this evaluation is on the Anthology, Reading To Do, and Reading To Learn. The effectiveness of Volume IV was previously evaluated in the formative study by the Human Resources Research Organization (HumRRO), 1985.

Purpose of the Evaluation

The primary purpose of the evaluation is to measure the effectiveness of the BSEP reading curriculum and to provide information for improving it. The evaluation is structured by the following questions:

1. How is the reading program being implemented? For example, what are the characteristics and course goals of the participating soldiers? What instructional activities are being used in the classroom? With what frequency is each skill module utilized?

2. To what extent is BSEP reading meeting its objectives? What is the measurable gain in student reading performance on the job-specific course materials? Does this gain transfer to students' performance on traditional reading tests?

3. What factors interact with the curriculum to affect student performance?

4. How do students and teachers react to the various components of the course?

In addition to answering these questions, the evaluation also relates to Big Bend's Quality Control Plan (QCP). Specific portions of that plan to which this study addresses itself are stated below.

A. LEARNING OUTCOMES BSEP/CSEP		
Objectives	**Outcomes**	**Documentation**
4.1 Basic skills will be taught that are relevant and useful for USAREUR enlisted soldier's jobs.	Seventy-five percent of the student evaluations will judge the course relevant and useful . . .	A summary of student evaluations.
4.2 Students will master the basic reading...competencies assigned to them.	Big Bend will define mastery in terms of gain scores on appropriate instruments.	An analysis of the pretest and posttests.
E. CURRICULUM		
3. Faculty and students opinion will be used in the ongoing revision of the curriculum.	Faculty and students will be given an opportunity to provide input into the curriculum.	Faculty and student curriculum evaluations. (See footnote 3.)

Description of Materials to be Evaluated

The main materials of the BSEP reading curriculum are The BSEP Reading Anthology and two accompanying workbooks, Reading To Do and Reading To Learn. The selections and exercises in these books differ from traditional ones in that they utilize excerpts from military job manuals and forms to help soldiers master the reading skills they use on the job. They employ a variety of sources and represent over forty different MOSs. The job-specific reading competencies treated in the curriculum result from a task analysis done on 95 MOSs by RCA Services Company under Army contract for the JSEP program. Those competencies were reviewed by Big Bend, then further refined by including only those common to at least 25 of the top 40 USAREUR MOSs. Materials for teaching the competencies were then chosen from field manuals, training pamphlets, soldier's manuals and military-related articles in The Stars and Stripes, the official military newspaper. A fine balance was sought between material that cut across a variety of MOSs and material that was not commonplace. Each of the resulting selections and exercises serves as a vehicle for teaching a job reading task shared by many MOSs in USAREUR.

The selections in The BSEP Reading Anthology and the exercises in Reading To Do and Reading To Learn are not arranged by level of difficulty or reading grade level. Those in the Anthology are arranged by theme, those in the workbooks by reading skills. Graded materials were not used for two reasons. First, theories of learning psychology contend that grade levels can diminish adults' sense of self-worth and produce negative effects on learning. Second, the materials in the Anthology are those that the soldier must use on the job. Some of them are difficult. Since the goal of instruction is to improve soldiers' performance on job-reading tasks, it is necessary to use job reading materials themselves, not simplifications. Explanations of the processes and exercises in each skill module have been written in simple terms.

The eight skill modules contained in Reading To Do and Reading To Learn address skills used for locating information for immediate use and for retaining content and inferential skills for decision-making. The exercises emphasize the metacognitive processes necessary for mastering job-specific reading tasks. The content used to teach these processes reflects military job materials; the reading processes themselves remain traditional. A brief summary of the contents of each module and recommended teaching techniques follows.

Reading To Do

Module One teaches word knowledge. There are ten lessons, each containing 24 words. Each word is presented with a definition, pronunciation guide, and synonym. Word attack instruction is given for using pronunciation keys, synonyms, suffixes, antonyms, mnemonic devices, context clues, mental images, punning, root words, prefixes, categorization, and etymology to facilitate vocabulary study. The list of words in each exercise is derived from reading selections in The BSEP Reading Anthology--with the exception of Lessons Six and Nine, which come from 504 Absolutely Essential Vocabulary Words, a commercial text. All the words presented in the module were selected because of their frequency in military materials. They were field-tested in BSEP reading classes.

In addition to the exercises in each lesson, the first module contains a pretest and posttest, as well as three cumulative reviews. The module is designed for individual or group instruction. Use of group instruction for vocabulary study is recommended because it allows for discussion. Adult learners are sometimes egocentric, seeing things only from their own point of view. For this reason they sometimes do not understand why answers are incorrect and they may continue to make the same mistakes again and again. Group instruction permits other points of view to be presented by peers in a non-threatening way. Group definitions give students a personal feeling of ownership for the vocabulary items and aids learning. An additional benefit results from frequent oral repetition and oral review.

Module Two teaches soldiers to work with procedural directions and prose. This is the kind of material that does not usually need to be learned or memorized (since the manuals are usually at hand) but does need to be quickly located and understood. This module gives instruction and practice in finding the facts and getting the main idea from job materials. It also teaches soldiers to organize the steps of procedures they must follow. Each of the three lessons in this module contains an explanation and example of the specific reading process being presented, a tryout exercise with immediate feedback for the soldier, and several practice exercises with materials in the Anthology. The module also contains a pretest and a posttest.

Contrary to the whole-group methodology suggested for teaching vocabulary, group discussion is not recommended for teaching Module Two. This is because comprehension is an individual activity, once decoding and word attack skills have become automatic. The background the reader brings to the material provides a context for interpreting it;

and each reader's background is unique. To structure a lesson so that all students proceed at the same rate results in a pace that is too fast for some, and too slow for others. Group instruction in reading comprehension is useful only when it is necessary to expand student's prereading background or when the process of comprehending must be taught.

Module Three treats the use of diagrams, illustrations, charts, and completed forms. Soldiers use these visual aids on the job and must learn how to "read" them to locate information quickly. Lesson One presents the rationale for reading pictorial details. Lesson Two explains the use of symbols in verbal and pictorial form. Lesson Three provides instruction for finding information on two-column and three-column charts. Lesson Four teaches soldiers how to scan to locate information on completed forms. Lesson Five examines the symbols and organization of flow charts and explains how to "read" them. Each lesson presents material through examples and explanation, followed by practice exercises based on the Anthology. In addition, the module contains a pretest and posttest. It is designed for individual use by soldiers.

Module Four teaches soldiers to use tables of contents, indexes, and glossaries. It also gives instruction in combining information from multiple sources, such as a diagram and a set of directions or charts. The module provides pre- and posttests and numerous practice exercises for each reading process and uses selections from throughout the Anthology. The module may be used for either individual or group instruction.

Reading To Learn

Module Five teaches soldiers to use context clues to understand technical terms, acronyms, abbreviations, multiple meanings, and figurative language. Lesson One provides instruction in locating definitions within the text for bold-faced and italicized words, acronyms, and abbreviations. Lesson Two helps soldiers utilize dictionary information along with context clues to choose the correct definition for words with more than one usage. Lesson Three presents suggestions for understanding figurative language. The module also contains pre- and posttests. It is designed for individual use, but Lesson Three may be enhanced by group instruction and discussions.

Module Six instructs soldiers in the use of inferences to make decisions. Lesson One presents a four-step metacognitive process for making inferences. Students are taught to compare and combine their past knowledge with new, unfamiliar facts. They learn to use what they already know to get information needed to make decisions. Lesson Two teaches soldiers how to recognize relevant and irrelevant information.

Lesson Three provides comparison strategies for assembling information gathered from more than one source. All of these processes are used frequently by soldiers on the job as they troubleshoot. This module is designed for individual use, but group instruction is recommended for treating the process presented in each lesson.

Module Seven assists soldiers in solving problems encountered on the job, such as troubleshooting, emergencies, interpreting directions and policies, and the like. It teaches them strategies for identifying causes and effects and for predicting outcomes. It contains two lessons and pre- and posttests. This module should be taught like Module Six.

Module Eight introduces soldiers to study-reading. Lesson One presents strategies for remembering sequential steps in a procedure, series of numbers, and technical words. Lesson Two teaches soldiers how to organize their reading by means of the "SQ3R System," and to adjust their reading rate to the type of material being read. Lesson Three provides three varieties of notetaking techniques, including visual mapping. The module contains knowledge-based pre- and posttests and is intended for individual use. The exercises may be used to extend development of skills in main idea, detail, and critical thinking as well as study-reading.

The eight reading exercise modules in Reading To Do and Reading To Learn may be used in any order. The results of the BBCC Diagnostic Reading Test, administered during the first day of class, dictate the modules in which each soldier should work. If more than one soldier needs to work in the same skill area, group work can be beneficial. (See recommendations under individual module summaries above.) Work is assigned according to the individual student needs and progress is documented on the Individual Learning Contracts. Mastery level for each reading process is 80 percent.

METHOD

Design

This study utilized a pretest-posttest single group modified time-series design. The quasi-experimental design was chosen because it is very sensitive for investigating causal claims, i.e. effects of planned treatment, and beause use of a control group (as in a true experimental design) was not possible. That is, it was not feasible to withdraw the materials from BSEP classrooms after their integration into the reading program over a period of almost three years. Pretest/posttest measurements were taken on the TABE and the GT Predictor Test.

Pretest/Posttest measurements on the modules were done incrementally within the class.

Because the frequency of scheduled BSEP reading classes was not predictable, individual sites chosen to participate in the evaluation were requested to evaluate only one reading class at their site during the evaluation period (September, 1986 through March, 1987). The selection of the individual class and instructor were left to the master teacher, based on the availability of scheduled classes and instructional personnel. To control for differences in soldier ability level required for various MOSs and for the concentration of specific MOSs at specific locations, the participating sites were selected on the basis of geographical dispersion throughout USAREUR. The following 38 locations were selected to participate in this evaluation:

AFCENT	Goeppingen	Nuernberg
Ansbach	Hanau	Pirmasens
Bad Kreuznach	Heidelberg	Rheinberg
Bamberg	Heilbronn	Schwaebish-Gmuend
Baumholder	Hohenfels	Schweinfurt
Bitburg	Kaiserslautern	SETAF
Bremerhaven	Karlsruhe	SHAPE
Darmstadt	Kirchgoens	Wertheim
Erlangen	Kitzingen	Wiesbaden
Flensburg	Mainz	Wildflicken
Frankfurt	Mannheim	Worms
Fulda	Muenster	Wuerzburg
Giessen	New Ulm	

Some of the classes evaluated were composed exclusively of BSEP reading students; others were multiple-subject classes with only partial populations of BSEP reading students. The earliest class included in the study began on 8 September 1986; the last class ended on 12 March 1987.

Participants

Soldiers were selected through the standard procedures used by the education centers and unit commanders for participation in the BSEP reading program, without any regard to this evaluation, (i.e., by means of TABE scores). One hundred eighty three soldiers participated, ranging in rank from E-2 through E-7, with approximately two thirds E-4s and E-5s.

Almost all of the soldiers were male (93%), and most had completed 12th grade or had a GED equivalency (86%). Slightly more than one half of the population was black (56%), and approximately one tenth did not list English as their primary language (9%) or speak English at home (11%). (These characteristics are presented in greater detail in Table 1.)

TABLE 1
Demographic Characteristics of Soldier Participants

Rank (n= 183)	n	%
E-2	19	10.4
E-3	38	20.8
E-4	61	33.3
E-5	56	30.6
E-6	8	4.4
E-7	1	0.5

Sex (n= 183)	n	%
Male	171	93.4
Female	12	6.6

Last Grade Completed (n=183)	n	%
9th	1	0.5
10th	3	1.6
11th	5	2.7
12th	143	78.1
GED	14	7.7
1 yr. college	8	4.4
+1 yr. college	9	4.9

Ethnic Background (n=180)	n	%
White	56	31.1
Black	100	55.6
Hispanic	14	7.8
Other *	10	5.6

Primary Language (n=179)	n	%
English	163	89.1
Spanish	11	6.0
Other *	5	2.7

Language Spoken At Home (n=179)	n	%
English	158	86.3
Spanish	15	8.2
Other *	6	3.3

(*included Samoan, Tagalog, Polish, Korean, and Portuguese)

Participants were also asked what methods they preferred for acquiring information. Although roughly half indicated that they liked to get information through reading (55%), more than two-thirds showed a preference for alternate methods (68%). Almost three-quarters of the participants chose to take the course (73%), and more than eighty percent listed one of their reasons for taking the course as raising their GT scores (83%). (See Table 2 and "Results" for more information.)

TABLE 2
Motivation Characteristics of Soldier Participants (n=183)

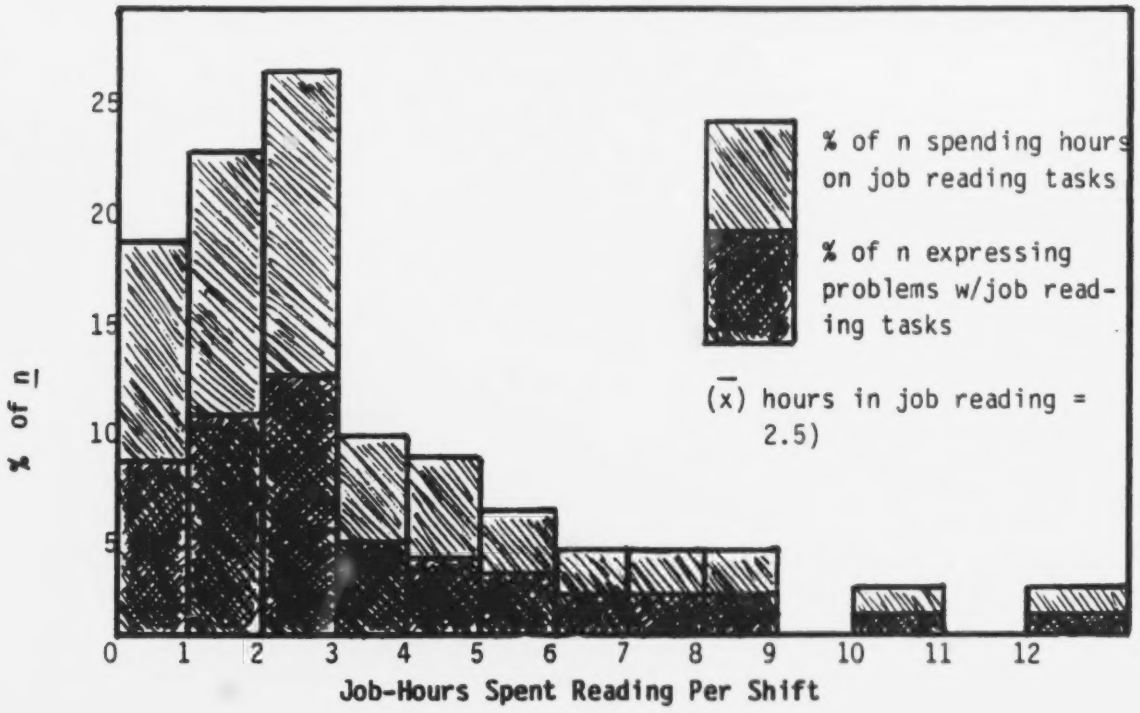
Preferred Methods(s) For Acquiring Information	**n**	**%**
Read about it	101	55.0
Listen	50	27.3
Be shown	70	38.0
Other	5	2.7
Reasons for Taking the Course	**n**	**%**
A. to raise GT (ASVAB) scores	151	82.5
B. to improve job performance	50	27.3
C. to raise TABE scores	35	19.0
D. to help pass SQT	25	13.6
E. to qualify on the GED	11	6.0
F. to obtain a H.S. Diploma	4	2.2
G. other	31	17.1
Students Choosing to Take Course	**n**	**%**
Yes	134	73
No	45	25
No response	4	2

* more than one response per participant possible

The soldiers were also asked how much time they spent reading on the job and whether or not they encountered problems in dealing with job-reading tasks. The mean job-reading time reported was 2.5 hours and almost half of the population indicated problems with job-reading tasks (44%). (See Fig. 1.) 60% of those whose responses indicated problems with job reading tasks also said they spent zero hours reading on the job.

FIGURE 1

Job Reading Time and Problems (n = 170)


% of n
25
20
15
10
5
0 1 2 3 4 5 6 7 8 9 10 11 12
Job-Hours Spent Reading Per Shift
% of n spending hours on job reading tasks
% of n expressing problems w/job reading tasks
($\bar{x}$) hours in job reading = 2.5)

Soldier's Comments Concerning Problems With Job-Reading

Manuals too hard
Can't understand some words
Can't understand what I read
Can't comprehend
The words are too hard to pronounce
Can't understand some regs (regulations)
Can't understand the writer's ideas
Don't understand some of the forms I use

Instruments

A brief description of the instruments used to collect evaluation data follow. A copy of each instrument is contained in Appendix A.

Reading Evaluation Summary Form - This form was used to identify the class site, instructor, meeting dates and the individual participants by name and last four digits of Social Security Number. It also was used to collect pre- and posttest individual scores on the TABE, GT Predictor Test, and the modules.

Student Pre-Class Survey - This form was used to obtain demographic and other data. Information was solicited on military rank, sex, previous education, ethnic background, primary language spoken and used at home, reasons for taking the course, preferred methods for acquiring information, number of hours spent reading, possible problems with job reading, and expectations from the course.

Student Post-Class Survey - This form was used to discover how participants rated individual modules, i.e., if they found them interesting, useful, relevant to their jobs, clearly written, and appropriate in length. Participants were also asked to rate the performance of the instructor and the facilities in which the class was held, and to comment on the length of the class and whether or not their expectations had been met.

Teacher's Evaluation of Texts - This form solicited information from instructors about the amount of time they used to prepare for teaching each module before class and the amount of time needed for students to complete each module in class. It also asked them to identify what they considered to be the weakest and strongest points of the materials and to list any additional materials they used to teach the competencies.

Procedures

The evaluation materials were hand-delivered by Big Bend's reading curriculum specialist to the master teacher at each participating site. Each packet of materials contained written directions, which were carefully gone over at time of delivery. (A copy of the letter to each master teacher and the written directions are contained in Appendix A with the instruments.) The evaluation forms were reviewed one at a time with each master teacher and questions were answered.

The master teachers were to brief the participating instructors in the same way before the start of the class which was to be studied. When all of the data had been collected for a class, the instruments were compiled into packets and returned to Big Bend's central office. The data was then entered into the computer, stored, and analyzed.

RESULTS

How is the reading program being implemented?

The BSEP reading course is designed for soldiers with specific characteristics and needs. The data presented in Table 1 indicate that the classes were composed primarily of male E-4s and E-5s who had completed the 12th grade or had acquired a GED certificate. The major eligibility criterion is that entering students have a TABE scale score in Total Reading below 582 (10.2 estimated grade level). Table 6 contains pre-class TABE data for the participants. Paired pre- and posttest TABE scores were available for only 76 of the participating soldiers. Their mean TABE pretest score was 535.7 (8.7 estimated grade level), with a minimum of 347 and a maximum of 607.

Data in Table 2 indicate the relative importance soldiers assigned to a number of possible course goals. Most soldiers (83%) indicated that raising their GT scores was an important goal. A large number also cited improving their job performance (27%). Less than one-fifth indicated that raising their TABE scores (19%) or helping them pass their SQT (14%) were important goals. Qualifying on the GED or obtaining high school diploma was cited by only 8% of the soldiers, a percentage that approximates that of students who had completed less than 12 years of school. Goals other than those listed on the questionaire were cited by almost one-fifth of the soldiers. Among these goals were to prepare for college, to improve reading skills, to prepare for reenlistment, and to enhance career/promotional opportunities.

BSEP reading is an individualized program but includes various types of group activities. Soldiers were asked to estimate how much time they spent working in four categories of activities (see Table 3). The majority of soldiers responded that they had worked independently or one on one with the instructor from 30% to 75% of the time. This coincides with Big Bend training guidelines which instruct teachers to allow soldiers a minimum of 2.5 hours in every four-hour class (approximately 65% of classtime) for working individually on assignments in the

Individual Learning Contracts. More than half the soldiers indicated less than 40% of class time was spent working in small or large groups and approximately 40% responded that less than 20% of class time was spent on these activities. Over fifty percent of the soldiers felt that more than 60% of class time was spent on whole group activities. This finding may reflect participants' misunderstanding of this item on the data collection instrument. Or it may be due to instructors' unfamiliarity with the newly integrated curriculum, resulting in a tendency to cling to the most traditional-looking lessons (e.g. vocabulary) and over-emphasize implementation recommendations for whole group instruction.

TABLE 3
Percentages of Time Spent in Various Activities
Student Estimates

(n = 179)	more than 80% of time	61-80% of the time	41-60% of the time	24-40% of the time	0-20% of the time
working independently or one to one with the instructor	11.2	19.7	22.5	32.0	14.6
working with a small group (one to four other students)	11.2	11.2	16.8	22.3	38.0
working with a larger group (five to ten other students)	10.6	20.1	12.3	15.6	41.3
working with the entire class	29.6	30.2	19.0	16.2	5.0

A wide variety of military job-specific reading competencies are taught in a BSEP Class. Teachers were asked to administer the pre- and posttests for any modules to individual soldiers diagnosed as needing to work in them. From this data the frequency of use for each module was abstracted. More than half the participants worked in Modules One and Two on word knowledge, locating details, sequencing facts, and finding the main idea. Thirty to forty percent of the participants worked in Modules Three, Five and Six on using charts and diagrams, technical and multiple meanings, and making inferences. Approximately one-fourth of the participants worked in Modules Four, Seven and Eight on reference skills, cause and effect, predicting outcomes, and reading to remember. (See Figure 2.)

FIGURE 2
Frequency of Module Use (n = 183)

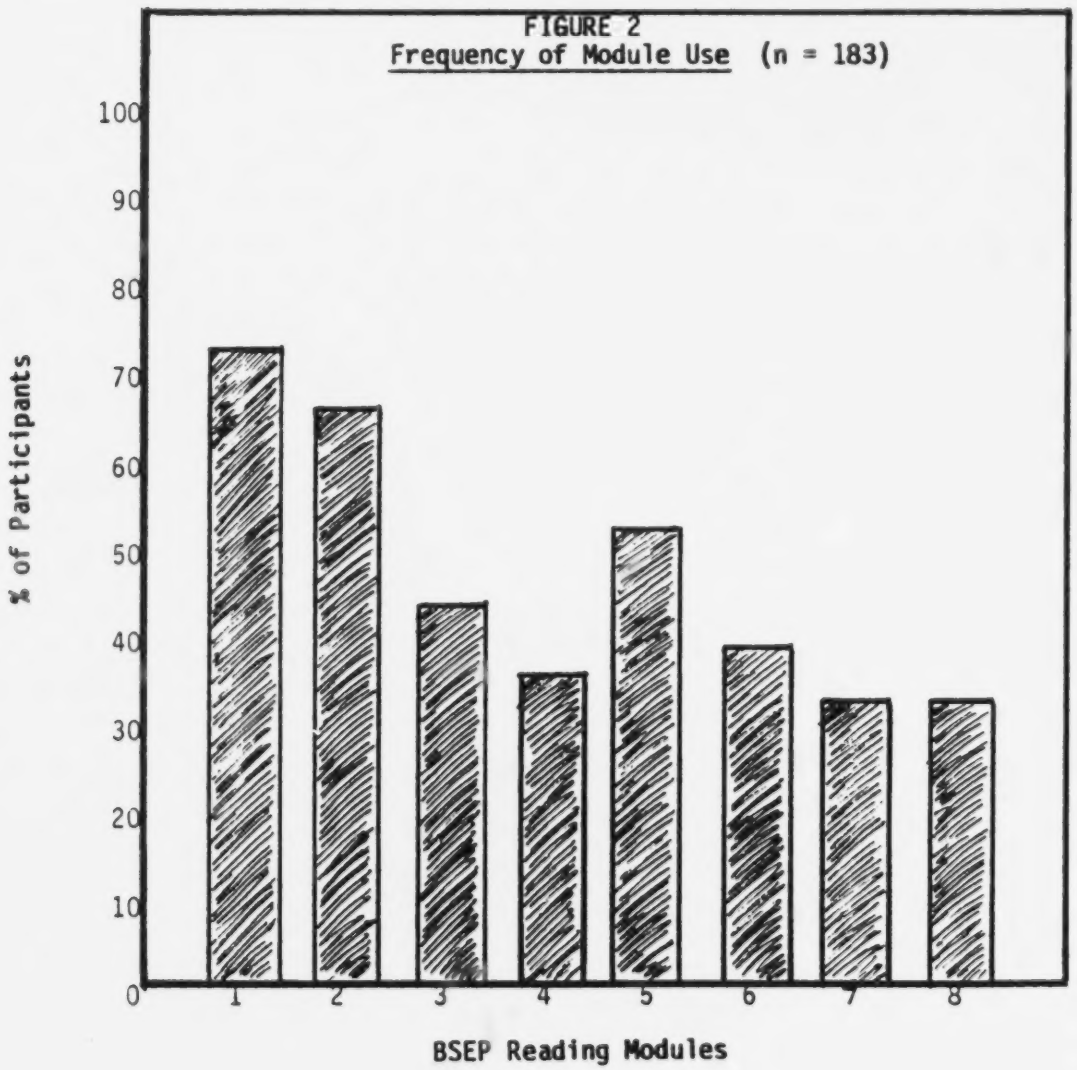


TABLE 4

Soldiers' Evaluation of Program Success

Were goals achieved? (n = 179)	n	%
completely	29	16.2
mostly	88	49.2
somewhat	47	26.3
little	10	5.6
not at all	5	2.8
Were expectations met? (n = 173)		
completely	37	21.4
mostly	86	49.7
somewhat	37	21.4
little	8	4.6
not at all	5	2.9
Do the skills taught apply to your army job? (n = 173)		
very well	39	22.5
fairly well	80	46.3
only so-so	41	23.7
not at all	8	4.6
can't tell	5	2.9
Do the skills taught apply to the GT? (n = 166)		
very well	54	32.6
fairly well	68	40.9
only so-so	23	13.9
not at all	7	4.2
can't tell	14	8.4
Did you like the course? (n = 174)		
liked very much	63	36.3
liked	84	48.2
neutral	18	10.4
disliked	9	5.1
disliked very much	0	0.0

To what extent is the reading course meeting its objectives? What is the measurable gain in student reading performance on the job-specific course materials? Does the gain transfer to students' performance with traditional materials external to the course?

The objectives of any program can be measured in a variety of ways. If the soldier/student is viewed as a customer, then the achievement of his goals and expectations in the program is a viable measure of the program's success. Of the soldiers participating in this study, 91% reported that they achieved their goals, and 90% reported that the course met their expectations. Of the 179 soldiers completing the post-class survey, 90% felt that the course competencies applied to their Army jobs, 86% indicated that the curriculum would help them with the GT, and 82% liked the course. (See Table 4 for a more complete summary of information.) Soldiers expressing dissatisfaction with the course (5%) on the post-class survey were considerably fewer than soldiers who indicated in the pre-class survey data that they did not choose to be enrolled in the course (24.6%-see Table 2.)

Soldier performance in BSEP is measured by pre- and posttest scores. This study examines scores from individual module pre- and posttests, TABE pre- and posttests, and GT Predictor pre- and posttests. The scores from individual modules indicate the amount of gain soldiers achieved on the military job-specific reading competencies taught by the curriculum. The largest gains were achieved on Modules One (50.1%), Two (39.6%), Seven (42.8%), and Eight (61.0%). All posttest average scores reflected gains of at least 14% over pretest average scores. (See Table 5.)

TABLE 5

Pre-Posttest Gains on Module Tests From The Job Specific Curriculum

		$\bar{x}$ score	S.D.	min	max	$\bar{x}$ gain	$\bar{x}$ % of gain
Module One	(n=130)						
60 items							
	pre	32.7	8.8	4.0	49.0	16.4	50.1
	post	49.1	8.4	7.0	60.0		
Module Two	(n=122)						
21 items							
	pre	11.6	3.7	3.0	19.0	4.6	39.6
	post	16.2	3.5	4.0	21.0		

TABLE 5 (cont.)

Pre-Posttest Gains on Module Tests From The Job Specific Curriculum

Module Three (n=68)						
24 items	$\bar{x}$ score	S.D.	min	max	$\bar{x}$ gain	$\bar{x}$ % of gain
pre	15.2	3.4	6.0	23.0	4.0	26.3
post	19.2	4.0	4.0	24.0		
Module Four (n=47)						
42 items						
pre	29.3	7.2	14.0	40.0	4.3	14.6
post	33.6	5.7	18.0	42.0		
Module Five (n=77)						
22 items						
pre	15.0	2.7	5.0	20.0	4.3	28.6
post	19.3	1.7	15.0	22.0		
Module Six (n=55)						
20 items						
pre	11.7	3.3	4.0	17.0	3.2	27.3
post	14.9	4.2	4.0	20.0		
Module Seven (n=40)						
12 items						
pre	6.3	2.1	2.0	10.0	2.7	42.8
post	9.0	2.7	2.0	12.0		
Module Eight (n=40)						
12 items						
pre	5.9	2.2	2.0	10.0	3.6	61.0
post	9.5	2.1	4.0	12.0		

Using job-specific military materials to teach reading is a relatively innovative educational strategy. To determine how well military job reading skills taught with these materials transferred to traditional reading tests used by the Army, the TABE and GT Predictor Test were administered to participating soldiers before and after BSEP instruction. The GT Predictor Test was used in lieu of the actual GT Test because of the secure and restricted nature of the latter. The GT Predictor Test was considered a suitable substitute for this study because it has a good correlation with the GT Test ($r = .75$). The "transfer" results are summarized in Table 6. They indicate that job-specific materials not only improve job-specific reading skills, but also improve traditional reading skills. The mean TABE scale score was 535.7 and the mean TABE posttest score was 597.1, for a mean gain of 61.4 points. This compares to a mean gain of 48.9 points reported in the last Self Evaluation, prior to the full implementation of the job-specific materials.

The GT Predictor Test pre- and posttest scores collected for this study were the combined raw scores from the verbal section of the test (word knowledge and paragraph comprehension). The data show a mean pretest score of 22.6 and a mean posttest score of 27.0, for a mean gain of 4.4, or 19%. This gain compares favorably with the mean gain achieved on the GT Predictor and GT Test at the end of AFCT Prep-Courses. (See Table 6.) Working only with the job-specific reading curriculum and with no test-wiseness coaching to prepare for taking the GT, the soldiers gained 4.4 points, compared to the 6.12 gain on the actual GT by soldiers enrolled in AFCT Prep.

In conclusion, findings from the data on the TABE and GT Predictor Test scores indicate a positive transfer from job-specific reading instruction to the improvement of traditional reading skills. Because the GT Test reflects the Army's measurement of soldiers' potential for career and promotional opportunities, these findings also indicate that instruction with job-specific reading materials enhances career and promotional potential for soldiers.

TABLE 6

Summary of Pre/Post Scores for the TABE and GT Predictor Test

Paired Scale Scores on TABE (Total Reading) (n = 76)

	$\bar{x}$	S.D.	MIN	MAX
TABE Pretest	535.7	47.5	347	607
TABE Posttest	597.1	46.4	444	736
Gain	61.4			

Paired Verbal Raw Scores On GT Predictor (Revised)
(n = 145)

	$\bar{x}$	S.D.	MIN	MAX
GT Predictor Pretest	22.6	7.8	2.0	42.0
GT Predictor Posttest	27.0	8.1	10.0	49.0
Gain	4.4			

Paired Verbal Raw Scores From AFCT Data
(n = 569)

	$\bar{x}$	MIN	MAX
GT Predictor Test	31.5	7.0	50.0
GT Test (AFCT)	37.9	12.0	50.00
Gain	6.4		

What factors interact with the curriculum to affect student performance?

Factors external to the curriculum materials could have contributed to the soldiers' performance on the module posttests, TABE posttest, and GT Predictor posttest. These include the teacher's amount of preparation and familiarity with materials and the ability to present them to the soldiers, classroom facilities, and the soldiers' attitudes toward participation in the Course. It was assumed that each of these factors would influence the learning outcomes of this study.

Examining data from teachers concerning the amount of time they spent on the curriculum prior to using it revealed that the majority (70%) had worked through only some of the curriculum before teaching it. Only 23.5% of the teachers had worked through all of it and 5.9% had not worked through any of it before entering the classroom. (See Table 7.) This lack of thorough preparation may be due to the recent implementation of materials by some sites and the unpredictable nature of the scheduling of BSEP reading classes.

Despite these pre-class preparation statistics, the teachers' presentations in class were rated high by the soldiers. Results show that 97% of the soldiers rated their teachers as good to excellent. Seventy-eight percent of the soldiers perceived their teachers to be organized, 56% thought them lively, 49% thought them creative, 79% thought them caring, 73% thought them interesting, and 52% thought them flexible. (See Table 7 for more complete data.) Overall, the presentations by teachers were well-received by the soldiers, with the highest-ranked teacher qualities being organization, interestingness, and caring about students. These findings indicate that the quality of teacher presentation exerted a positive influence on the learning environment during this study.

The soldiers rated classroom facilities on a scale of 1 to 5, with 1 being very good, and 5, being very poor. The data showed a distribution in all categories, although 52% of the ratings given were either 1's or 2's. Other than soldier comments from one site about construction noise, facilities appear to have had neither a negative nor positive influence on the outcomes of this evaluation. (See Table 8.)

As listed in Table 2 and discussed under the "Design" section of this report, soldiers choosing to be enrolled in the BSEP reading course (73%) far outnumbered those who did not (24.6%) and post-class data

regarding the soldiers' evaluation of program success (Table 4) show that only 5% of the population felt that the course had not met their goals and expectations by the end of the program. This appears to indicate that the content and presentation of the program were able to overturn most of the negative attitudes held at the beginning of the course. The soldiers' post-class reactions to the length of the program (60 hours) lend support to this interpretation. Ninety-four percent of them felt that the course shuld either remain the same length or be increased. (See Table 8 for complete data summary.)

TABLE 7
External Factors With Potential Influence on Student Performance: Teachers

Teacher preparation prior to teaching: (n = 17)

	n	%
worked through all of materials	4	23.5
worked through some of materials	12	70.6
worked through none of materials	1	5.9

Rating of teachers by soldiers: (n = 178)

Excellent	107	60.1
Very good	49	27.5
Good	16	9.0
Fair	6	3.4
Poor	0	0.0

Rating of teachers' presentations by soldiers: (n = 144)
(1 = highest, 5 = lowest)

organization	n	%
1	84	58.3
2	29	20.1
3	14	9.7
4	2	1.4
5	8	5.6

liveliness		
1	60	41.7
2	22	15.3
3	24	16.7
4	16	11.1
5	14	9.7

creativity	n	%
1	56	38.9
2	17	11.8
3	33	22.9
4	19	13.2
5	11	7.6
caring		
1	85	59.0
2	29	20.1
3	16	11.1
4	2	1.4
5	5	3.5
interesting		
1	72	50.0
2	33	22.9
3	19	13.2
4	6	4.2
5	6	4.2
flexibility		
1	59	41.0
2	16	11.1
3	37	25.7
4	12	8.3
5	10	6.9

TABLE 8
External Factors With Potential Influence on Student Performance: Program Length and Facilities

Soldier Rating of Facilities: (n = 144)
(1 = highest, 5 = lowest)

	n	%
1	55	38.2
2	21	14.6
3	24	16.7
4	21	14.6
5	21	14.6

Soldier Recommendations For Class Length (expressed in hours)
(n = 163)

	n	%	MIN	MAX	$\bar{x}$
Make it longer	74	45.4	70 hrs	300 hrs	111.4 hrs
Make it shorter	10	6.1	15 hrs	45 hrs	32.5 hrs
Keep it the same	79	48.5	--	--	--

How do students and teachers react to the various components of the course?

Using the post-class survey instrument to record their responses, soldiers were asked to evaluate each module in which they had worked. They were asked to evaluate the curriculum for length, clarity, difficulty, interest, and usefulness/relevance to their Army jobs. Tables 9 and 10 summarize these data. For each module (1-8) the most desirable ratings would have been the following:

Usefulness to Army Job:	5 = very useful, with the majority of responses within a range from 3 to 5 being acceptable.
Interesting:	5 = very interesting, with the majority of responses within a range from 3 to 5 being acceptable.
Difficulty Level:	3 = neither too easy nor too hard, with the majority of responses with a range of 2 to 4 being acceptable.
Clarity:	5 = most clear, with the majority of responses within a range of 3 to 5 being acceptable.
Length:	3 = neither too long nor too short, with the majority of responses within a range of 2 to 4 being acceptable.

Soldiers rated all eight modules within an acceptable range, with most responses clustering around the most desirable level in each category. Soldiers' written comments on the post-survey also indicated a favorable response to the curriculum materials and supported the curriculum's claim to be relevant to soldier's jobs. (See selected comments on next page.)

Selected Soldier Comments on BSEP/CSEP Reading Course

Most of the things we read applied to the Army
Very many of these skills actually apply everyday.
The charts will work real well at work. Now I understand what they mean.
If I take the GT Test now, it will raise my score.
I'm going to read my manuals better.
Some of the things I learned are really good like reading diagrams.
I heard some of the vocabulary words on the job sometimes before.
I can find what I'm lookin for but not use the maximum time now.
Learned a few new meanings and words and about some stuff that applies to my job.
Help me with my MOS.
I work with plenty of manuals and I feel I can (retain) a little more of what I read after this class.
Help you know what you read and to apply it.
Most of the things we read were Army related situations.
This reading course gave me the opportunity to learn ways to remember, think, and understand things I have read.
Now I will understand more what I have to read.
A lot of it was very infantry related to my MOS.
I'm in the manuals a lot and I got to know these reading skills.
We covered things soldiers need to know.
I got a lot of military knowledge.
It had a lot about Army subjects and how to read the manual better.
Everything that was taught helped me prepare for the GT Test.
To better understand the ARs when I read them.
The information we learned helped us be Army wise.

TABLE 9 - Reading to Do: Soldiers' Evaluation of Modules 1-2 (n = 177)

Module One:

Useful to Army Job:		n	%
Not useful	1	6	3.4
	2	10	5.6
	3	39	22.0
	4	59	33.3
Useful	* 5	54	30.5

Difficulty level:			
Too easy	1	2	1.1
	2	14	7.9
	* 3	111	62.7
	4	29	16.4
too difficult	5	4	2.3

Length:			
too long	1	14	7.9
	2	11	6.2
	* 3	103	58.2
	4	20	11.3
too short	5	16	9.0

Interesting:		n	%
Boring	1	9	5.1
	2	12	6.8
	3	41	23.2
	4	51	28.8
Interesting	*5	55	31.1

Clarity:			
unclear	1	5	2.8
	2	6	3.4
	3	25	14.1
	4	51	28.8
clear	*5	73	41.2

Module Two:

Useful to Army Job:		n	%
Not useful	1	4	2.3
	2	16	9.0
	3	42	23.7
	4	39	22.0
Useful	* 5	47	26.6

Difficulty level:			
Too easy	1	2	1.1
	2	13	7.3
	* 3	101	57.1
	4	24	13.6
too difficult	5	6	3.4

Length:			
too long	1	7	4.0
	2	13	7.3
	* 3	101	57.1
	4	21	11.9
too short	5	6	3.4

Interesting:		n	%
Boring	1	8	4.5
	2	12	6.8
	3	37	20.9
	4	55	31.1
Interesting	*5	40	22.6

Clarity:			
unclear	1	1	0.5
	2	10	5.6
	3	36	20.3
	4	52	29.4
clear	*5	48	27.1

* Most desireable ratings for each module:

TABLE 9 - Reading to Do:
Soldiers' Evaluation of Modules 3-4 (n = 177)

Module Three:

Useful to Army Job:		n	%
Not useful	1	4	2.3
	2	12	6.8
	3	37	20.9
	4	32	18.1
Useful	* 5	57	32.2

Interesting:		n	%
Boring	1	7	4.0
	2	10	5.6
	3	30	16.9
	4	38	21.5
Interesting	*5	53	29.9

Difficulty level:

Too easy	1	5	2.8
	2	18	10.2
	* 3	86	48.67
	4	21	11.9
too difficult	5	7	4.0

Clarity:

unclear	1	2	1.1
	2	7	4.0
	3	34	19.2
	4	48	27.1
clear	* 5	48	27.1

Length:

too long	1	10	5.6
	2	5	2.8
	* 3	92	52.0
	4	23	13.0
too short	5	10	5.6

Module Four:

Useful to Army Job:		n	%
Not useful	1	6	3.4
	2	8	4.5
	3	48	27.1
	4	35	19.8
Useful	* 5	37	20.9

Interesting:		n	%
Boring	1	8	4.5
	2	15	8.5
	3	44	24.9
	4	43	24.3
Interesting	*5	24	13.6

Difficulty level:

Too easy	1	8	4.5
	2	15	8.5
	* 3	81	45.8
	4	26	14.7
too difficult	5	3	1.7

Clarity:

unclear	1	4	2.3
	2	9	5.1
	3	41	23.2
	4	46	26.0
clear	* 5	32	18.1

Length:

too long	1	12	6.8
	2	8	4.5
	* 3	81	45.8
	4	26	14.7
too short	5	7	4.0

* Most desireable ratings for each module

TABLE 10- Reading to Learn:
Soldiers' Evaluation of Modules 5-6 (n = 177)

Module Five:

Useful to Army Job:		n	%
Not useful	1	7	4.5
	2	14	9.0
	3	46	29.5
	4	37	23.7
Useful	* 5	34	21.8

Interesting:		n	%
Boring	1	10	6.4
	2	20	12.8
	3	40	25.6
	4	42	26.9
Interesting	*5	26	16.7

Difficulty level:			
Too easy	1	8	5.1
	2	20	12.8
	* 3	75	48.1
	4	24	15.4
too difficult	5	9	5.8

Clarity:			
unclear	1	5	3.2
	2	14	9.0
	3	45	28.8
	4	42	26.9
clear	* 5	31	19.9

Length:			
too long	1	11	7.1
	2	4	2.6
	* 3	84	53.8
	4	27	17.3
too short	5	12	7.7

Module Six:

Useful to Army Job:		n	%
Not useful	1	3	1.9
	2	8	5.1
	3	44	28.2
	4	38	24.4
Useful	* 5	36	23.1

Interesting:		n	%
Boring	1	6	3.8
	2	6	3.8
	3	40	25.6
	4	42	26.9
Interesting	*5	33	21.2

Difficulty level:			
Too easy	1	3	1.9
	2	8	5.1
	* 3	77	49.4
	4	30	19.2
too difficult	5	8	5.1

Clarity:			
unclear	1	3	1.9
	2	9	5.8
	3	25	16.0
	4	50	32.1
clear	* 5	38	24.4

Length:			
too long	1	8	5.1
	2	8	5.1
	* 3	85	54.5
	4	20	12.8
too short	5	7	4.5

* Most desireable ratings for each module

TABLE 10- Reading to Learn: Soldiers' Evaluation of Modules 7-8 (n= 177)

Module Seven:

Useful to Army Job:		n	%
Not useful	1	2	1.3
	2	10	6.4
	3	34	21.8
	4	38	24.4
Useful	* 5	25	16.0

Interesting:		n	%
Boring	1	3	1.9
	2	5	3.2
	3	32	20.5
	4	37	23.7
Interesting	*5	30	19.2

Difficulty level:			
Too easy	1	3	1.9
	2	6	3.8
	* 3	73	46.8
	4	22	14.1
too difficult	5	3	1.9

Clarity:			
unclear	1	0	0.0
	2	7	4.5
	3	23	14.7
	4	47	30.1
clear	* 5	28	17.9

Length:			
too long	1	9	5.8
	2	4	2.6
	* 3	69	44.2
	4	21	13.5
too short	5	5	3.2

Module Eight:

Useful to Army Job:		n	%
Not useful	1	4	2.6
	2	13	8.3
	3	20	12.8
	4	33	21.2
Useful	* 5	45	28.8

Interesting:		n	%
Boring	1	8	5.1
	2	6	3.8
	3	25	16.0
	4	35	22.4
Interesting	*5	39	25.0

Difficulty level:			
Too easy	1	3	1.9
	2	6	3.8
	* 3	72	46.2
	4	23	14.7
too difficult	5	7	4.5

Clarity:			
unclear	1	5	3.2
	2	7	4.5
	3	24	15.4
	4	38	24.4
clear	* 5	37	23.7

Length:			
too long	1	8	5.1
	2	9	5.8
	* 3	69	44.2
	4	19	12.2
too short	5	7	4.5

* Most desireable ratings for each module

TABLE 11
Teacher Estimation of Time Needed For Students To Work Through Each Module

(n = 17)

	$\bar{x}$ hours
Module One:	15.8
Module Two:	7.4
Module Three:	5.8
Module Four:	4.5
Module Five:	7.1
Module Six:	7.4
Module Seven:	6.5
Module Eight:	8.3

Teachers were asked to estimate the amount of time needed for students to work through all of the exercises in each module. Table 11 summarizes their responses. Results indicate that Module One Word Knowledge, requires the most time for completion, with an estimated average time of 15.8 hours. This breaks down to approximately one hour for presentation, discussion, and exercises in each of the 10 lessons and 5 hours for review tests, practice and pre- and posttests. Modules Two, Five, Six and Eight were estimated to need an average time of 7 to 8 hours each for completion. The least amount of time required for completion was estimated to be 4.5 hours for Module Four.

Teachers were instructed to use the job-reading course curriculum 75% of class time (45 hours). The remaining time was available for teacher-made or commercially-produced materials. This was done to allow for variations in teaching style and to encourage teacher flexibility and creativity to meet individual student requirements. The teachers were asked to record their use of any additional materials they used in conjunction with the job-specific curriculum materials to help soldiers master job reading tasks. Responses indicated that 88% of the teachers used additional materials, primarily teacher-made exercises (80%) and commercial texts (73%). The modules cited most frequently for use with supplemental materials were 2,6, 7, and 8. (See Table 12 for data summary.)

TABLE 12
Supplemental Materials Used By Teachers

(n = 17)

Materials Used:	With Which Modules	n	%
Teacher-made exercises:	1,2,4,6,7,8	12	80.0
Commercial materials:			
Skills in Reading	6,7	2	13.2
SRA & RFU Kits	6,7,8	6	40.0
Be A Better Reader	2	1	6.6
Bill Cosby Time-Life Tapes	2,6	4	26.6
Additional soldiers' manuals:	3	3	20.0
		n	%
Total number of teachers using supplemental materials		15	88.2

Teachers were also asked to react to what they perceived as the strongest and weakest aspects of the program. The strongest aspect of the program most frequently listed was its motivational ability for soldiers because of its job relevance. Other strengths included its organization, design,completeness of skill coverage, and the appropriateness of the vocabulary in Module One. The weakest aspects of the program most frequently listed were the need to coordinate the in-class diagnostic test with the curriculum, the need for more practice exercises for inferential reading processes, and the difficulty of the material for the lowest-level BSEP students. (See Summary of Teachers' Comments on Curriculum.)

Summary of Teachers' Comments on Curriculum

Strongest Aspects:

- The program is complete in just three books.
- The MOS charts and diagrams in Module 3 are skills soldiers are weak in; these are the only materials available to teach these skills.
- The vocabulary is a good choice of words; it helps the soldiers read military materials.
- Well-organized; easy to follow.
- The military content applies to soldiers better than commercial materials.
- The students identify with the job-topics covered in the modules. They are proud of their knowledge in these areas or anxious to learn more about them.
- Whole group discussions really helped my students. I watched them learn how to think.
- The wide variety of job reading-tasks covered.
- Materials motivated students to review reading skills they usually hate.
- At first the soldiers were bored with the military topics. However, the job materials reinforced the reality of their situation, and they came to understand that their future depended on their ability to master these materials.

Weakest aspects:

- Help! I need more practice exercises for main idea and inferences!
- The diagnostic test should be correlated with the materials (also the TABE) so soldiers don't feel like they're tested on one thing and taught another.
- The time limits on the pre- and posttests in the modules needs to be adjusted-too short.
- There isn't enough time to give the 5.0 reading level guys in the class all the help they need with these materials. They're too hard for them.
- When do we get a new diagnostic test that fits the curriculum?
- Soldiers want MOS specific materials. They have trouble understanding why they need to use charts from someone else's MOS in the exercises.
- Not enough class time to complete all the exercises in the modules.
- Some of the Anthology passages will become dated quickly.
- My lowest BSEP students can't use these materials.

Quality Control Plan

In addition to answering the four questions above which structured this report, the evaluation of BSEP Reading also addressed itself to specific portions of the Quality Control Program (QCP). (See "Purpose of the Evaluation.") Under the BSEP/CSEP Learning Outcomes of the QCP, 75% of the students are expected to evaluate the course as relevant and useful. Soldier-responses on the post-survey indicate that the reading curriculum meets this goal. The majority of the soldiers said that the course competencies apply to their Army jobs (90%) and will help them raise their GT scores (86%). Most also rated the content of individual modules as useful and relevant to their MOSs. (See Tables 4,9, 10, and Soldiers' Comments from Post Survey.) A second learning outcome specifies that curriculum will enable soldiers to master basic reading competencies. Results of the evaluation show significant gains in all pre/posttest measures used in the study: individual modules, GT Predictor Test, and TABE. (See Tables 5 and 6.) The QCP Curriculum outcome requiring that curriculum materials and methods be revised based on input from faculty and students has also been met by design of this evaluation.

DISCUSSION

Limitations Of This Study

Selection bias was a potential limitation of this study because participating students were not randomly selected or assigned to classes. However, the sample appears to have been composed of students with entry characteristics like those found in most BSEP reading classes. It is not known if teacher selection differed from the usual procedures. There is the possibility, therefore, that the teachers were not representative of BSEP reading teachers, in general. However, the geographic dispersement of classes and the fixed scheduling of classes insures that the established practices for teacher assignment were in effect during this study.

The design of the evaluation as noted earlier, was not able to include a control group because of the infeasability of withdrawing job-reading materials from any portion of the program.

Summary of Results

The results of this study indicate that BSEP Reading courses are being conducted in the manner prescribed by the contract. For the most part, students possess the expected entry characteristics. Two of the three most important goals for students are those identified in the contract: improvement of TABE scores and job performance. The most frequently indicated student goal, however, was GT improvement. This goal is also being met according to evaluation results of gain scores on the GT Predictor Test.

The problems with job reading tasks indicated by soldiers are now being addressed by the military job-reading curriculum. Soldiers and teachers judged the curriculum to be both relevant and useful to soldiers' occupational needs. Growth on reported individual pre/post module tests evidences the effectiveness of curriculum materials in addressing job-reading competencies. The amounts of time spent in various learning activities in the classroom meets with teacher training criteria. External factors did not appear to interfere with learning outcomes in a negative way.

Teacher's presentation of materials was judged good to excellent by students. Preparation time was shown to be less than fully satisfactory and needs to be addressed in future teacher training sessions.

Standardized test results cited in this study underscore the effectiveness of using job-reading materials to improve traditional as well as job reading skills. BSEP students improved on average, approximately 61 points in TABE Total Reading scale scores during the 60-hour course with instruction in job-specific reading. Students also improved approximately 4.5 points in verbal raw scores on the GT Predictor Test during the course and gained from 14% to 60% on individual job reading tasks presented in the curriculum materials. Teacher requests for additional practice exercises and materials for use with low entry level BSEP students should be responded to.

FOOTNOTES

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2. Diehl & Mikulecky (1980) see footnote 1.

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   Sticht, T.G. (Ed.) (1975) Reading for Working: A Functional Literacy Anthology. Alexandria, VA. Human Resources Research Organization.

   Valentine, T. (1985) Adult Functional Literacy as a Goal of Instruction. Paper presented to the American Education Research Association; Chicago.

3. In addition, section E. Curriculum 1. of the Quality Control Plan calls for materials to be designed to enable soldiers to master the requisite skills and structured in accordance with prevailing theories of adult, competency-based education. Documentation of these qualifications for the BSEP reading curriculum are yet to be received from the committee of professional experts. Nonetheless, when the materials and program design were reviewed by Drs. Thomas Sticht, Larry Milukecky, Rosemarie Parks and other adult literacy experts in the U.S. in April, 1986, they were met with approval and support.

DIRECTIONS

The purpose of this form is to collect evaluation data on the BSEP/CSEP Reading Program. The data will be used to correlate student pre/posttest scores on the modules in Reading-To-Do and Reading-To-Learn with their pre/posttest scores on the TABE and on Big Bend's revised GT Predictor Test (WK + PC, only).

1. The Office Assistant will type in the required information at the top of the form and enter the students' names and SSNs (last four digits only).

2. The BSEP Reading Teacher will enter each student's pre/post module raw scores (the actual number of items answered correctly) and pre/post GT Predictor scores (the raw score sum of WK + PC). This will require the teacher to administer the revised Predictor Test twice in the classroom: once on the first day of class and once on the last day.

3. The Education Center Staff will record each student's pre/post TABE Total Reading scores (in scaled scores) as soon as the class has ended.

4. The Office Assistant will collect the form, check it for errors, and return it promptly to:

Curriculum Director
Big Bend Community College
APO (Local Forces) 09111

BSEP/CSEP READING EVALUATION
SUMMARY/FORM

Class Site: _____

Class Dates: _____

Teacher: _____

* * * * * * * * * (Reading-To-Do) * * * * * * *

Student Name	SSN	TOTAL TABE READING		GT PREDICTOR (WK + PC)		MODULE 1 TESTS		MODULE 2 TESTS		MODULE 3 TESTS		MODUL TEST
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												

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OVER

* * * * * * * (Reading-To-Learn) * * * * * * *

Student Name	MODULE 5 TESTS		MODULE 6 TESTS		MODULE 7 TESTS		MODULE 8 TESTS	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

BSEP Reading
STUDENT PRE-CLASS SURVEY

Name: _____ SSN (last 4): _____

Primary MOS: _____

Directions: Place an "X" on the proper line for each of your answers.

1. What is your military grade?

E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8	E-9
___	___	___	___	___	___	___	___	___
1	2	3	4	5	6	7	8	9

2. What is your sex?

Male	Female
___	___
1	2

3. What is the last grade you completed in school?

8th	9th	10th	11th	12th	GED	1 yr college	More than 1 yr of college
___	___	___	___	___	___	___	___

4. What is your ethnic group?

1. _____ White 2. _____ Hispanic 3. _____ Black 4. _____ Other

5. Which of the following are <u>your</u> reasons for attending this BSEP class? (You may check more than one.)

___ a. to raise my GT (ASVAB) scores

___ b. to improve my job performance

___ c. to raise my TABE scores

___ d. to help pass my SQT

___ e. to qualify on the GED

___ f. to obtain a high school diploma

___ g. other (please write reason) _____

6. Which way do you BEST like to get information about something you need to know more about?

_____ 1. Read about it.

_____ 2. Listen to presentations or talks about it.

_____ 3. Have someone show and tell you about it.

_____ 4. Other (describe) _____

_____

7. What is your primary language? (the one you speak, read, and write best)

_____

8. What language was spoken in your home? _____

9. Were you foreign born? _____yes _____no

10. If yes, which country? _____

11. If yes, how long have you lived in the U.S.?_____

12. On average, how much time does your job require you to spend reading per day? _____ (hours)

13. Does reading the military manuals for your job ever cause you any problems? _____ yes _____ no

14. If yes, what are they? _____

_____

15. Did you choose to take this course? _____ yes _____ no

16. What do you expect to get from it? _____.

_____

BSEP Reading
Student Post-Class Survey

Name: _____ SSN (last 4): _____

Please take time to evaluate the BSEP reading course you just completed. Be honest. Your answers will be kept confidential. They will be used only to help improve the course. For questions 1-6, put an "X" on the proper line.

1. Do you think you have achieved what you wanted in this class?

Completely	Mostly	Somewhat	Little	Not at all
1	2	3	4	5

2. How would you rate your teacher?

Excellent	Very Good	Good	Fair	Poor
1	2	3	4	5

3. How much time did you spend working with the teacher one-to-one?

Most of time(more than 80%)	Quite a bit of time(61-80%)	About half of the time (41-60%)	Some of the time (21-40%)	Hardly any time at all (0-20%)
1	2	3	4	5

4. Working with a small group of other students (2-4 others)?

Most of the time(more than 80%)	Quite a bit of time(61-80%)	About half of the time (41-60%)	Some of the time (21-40%)	Hardly any time at all (0-20%)
1	2	3	4	5

5. Working with a larger group of students (5-10 students)?

Most of the time(more than 80%)	Quite a bit of time(61-80%)	About half of the time (41-60%)	Some of the time (21-40%)	Hardly any time at all (0-20%)
1	2	3	4	5

6. Working with the whole class?

Most of the time(more than 80%)	Quite a bit of time(61-80%)	About half of the time (41-60%)	Some of the time (21-40%)	Hardly any time at all (0-20%)
1	2	3	4	5

For questions 7-26, rate each module of the Reading-to-Do book on a scale from 1 to 5. Circle the number that best describes your feeling. If you need to, look back at the book to help you remember. (If you didn't use a module, skip the questions about it.)

Module One: Word Knowledge (pp. 3-64)

In general, I found this module

7.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
8.	(boring)	1	2	3	4	5	(interesting)
9.	(too easy)	1	2	3	4	5	(too hard)
10.	(unclear)	1	2	3	4	5	(clear)
11.	(too long)	1	2	3	4	5	(too short)

Module Two: Procedural Directions and Prose (pp. 65-94)

In general, I found this module

12.	(not useful to my Army Job)	1	2	3	4	5	(useful to my Army job)
13.	(boring)	1	2	3	4	5	(interesting)
14.	(too easy)	1	2	3	4	5	(too hard)
15.	(unclear)	1	2	3	4	5	(clear)
16.	(too long)	1	2	3	4	5	(too short)

Module Three: Using Diagrams, Illustrations and Charts (pp. 95-144)

In general, I found this module

17.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
18.	(boring)	1	2	3	4	5	(interesting)
19.	(too easy)	1	2	3	4	5	(too hard)
20.	(unclear)	1	2	3	4	5	(clear)
21.	(too long)	1	2	3	4	5	(too short)

Module Four: Reference Skills (pp. 145-186)

In general, I found this module

22.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
23.	(boring)	1	2	3	4	5	(interesting)
24.	(too easy)	1	2	3	4	5	(too hard)
25.	(unclear)	1	2	3	4	5	(clear)
26.	(too long)	1	2	3	4	5	(too short)

For questions 27-46, rate each module of the Reading-to-Learn book on a scale from 1 to 5. Circle the number that best describes your feeling. If you need to, look back at the book to help you remember. (If you didn't use a module, skip the questions about it.)

Module Five: Technical Terms, Words with Multiple Meanings, and Figurative Language (pp. 3-56)

In general, I found this module

27.	(not useful to) my Army job)	1	2	3	4	5	(useful to my Army job)
28.	(boring)	1	2	3	4	5	(interesting)
29.	(too easy)	1	2	3	4	5	(too hard)
30.	(unclear)	1	2	3	4	5	(clear)
31.	(too long)	1	2	3	4	5	(too short)

Module Six: Using Inferences to Make Decisions (pp. 57-98)

In general, I found this module

32.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
33.	(boring)	1	2	3	4	5	(interesting)
34.	(too easy)	1	2	3	4	5	(too hard)
35.	(unclear)	1	2	3	4	5	(clear)
36.	(too long)	1	2	3	4	5	(too short)

Module Seven: Problem Solving Strategies (pp. 99-126)

In general, I found this module

37.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
38.	(boring)	1	2	3	4	5	(interesting)
39.	(too easy)	1	2	3	4	5	(too hard)
40.	(unclear)	1	2	3	4	5	(clear)
41.	(too long)	1	2	3	4	5	(too short)

Module Eight: Reading to Remember (pp. 127-168)

In general, I found this module

42.	(not useful to my Army job)	1	2	3	4	5	(useful to my Army job)
43.	(boring)	1	2	3	4	5	(interesting)
44.	(too easy)	1	2	3	4	5	(too hard)
45.	(unclear)	1	2	3	4	5	(clear)
46.	(too long)	1	2	3	4	5	(too short)

For questions 47-58, rate parts of the BSEP/CSEP Reading course on a scale of 1 to 5. Circle the number that best describes your feeling.

Teacher Presentation

47.	(disorganized)	1	2	3	4	5	(organized)
48.	(lively)	1	2	3	4	5	(lifeless)
49.	(creative)	1	2	3	4	5	(ordinary)
50.	(uncaring)	1	2	3	4	5	(caring)
51.	(boring))	1	2	3	4	5	(interesting)
52.	(flexible)	1	2	3	4	5	(stiff)

Facilities (classroom)

53.	(good)	1	2	3	4	5	(poor)

Answer questions 54-58 in full. First put an "X" on the proper line. Then give a short explanation of your rating.

54. How did you like the BSEP reading course?

_____	_____	_____	_____	_____
Liked it very much	Liked it	Neither liked nor disliked it	Disliked it	Disliked it very much

(Comment:) _____

55. How do the BSEP reading skills you learned apply to your Army job?

_____	_____	_____	_____	_____
Apply very well	Apply fairly well	Apply only so-so	Do not apply at all	Can't tell if they apply

(Comment:) _____

56. How do the BSEP Reading Skills you learned apply to the Army's GT test?

_____	_____	_____	_____	_____
Apply very well	Apply fairly well	Apply only so-so	Do not apply at all	Can't tell if they apply

(Comment:) _____

57. Did the course give you what you expected?

_____	_____	_____	_____	_____
Definitely (100%-80%)	Pretty much (80%-60%)	So-so (60%-40%)	Not much (40%-20%)	Barely (20%-0)

(Comment:) _____

58. If you had your choice, would you lengthen or shorten the course?

_____ Shorten it. How long should it be? _____ hours

_____ Lengthen it. How long should it be? _____ hours

_____ Keep it the same.

TEACHER'S EVALUATION OF READING-TO-DO/READING-TO-LEARN

1. Did you work through the student exercises before class?

   _____ Yes, all _____ Yes, some _____ No, none

2. How much class time is needed for a student to work through each module? (Please express time in decimal hours: e.g., 3.5 hours)

   Module 1: _____ Module 5: _____

   Module 2: _____ Module 6: _____

   Module 3: _____ Module 7: _____

   Module 4: _____ Module 8: _____

3. Did you use supplementary materials to teach the skills covered by the module? If so, what materials did you use?

	Skill	Supplemental materials used
Module 1:		
Module 2:		
Module 3:		
Module 4:		
Module 5:		
Module 6:		
Module 7:		
Module 8:		

4. What additional "teacher materials" that would be helpful to you in making this program more effective?

_____

_____

_____

_____

_____

5. What are the strongest aspects of the new materials?

_____

_____

_____

_____

_____

_____

6. What are the weakest aspects? Do you have any suggestions for improving them?

_____

_____

_____

_____

_____

Please return to:

[illegible] Curriculum Director
Big Bend Community College
ATTN: Curriculum Office
APO (Local Forces) 09111